## 2008 BICYCLE TRANSPORTATION PLAN



# CITY OF MOUNTAIN VIEW PUBLIC WORKS DEPARTMENT

**ADOPTED MAY 27, 2008** 

## **ACKNOWLEDGEMENTS**

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# EXECUTIVE SUMMARY

#### **EXECUTIVE SUMMARY**

In 1992, the City Council adopted the Mountain View General Plan, which contained goals and policies to "make it easier and safer for people to travel by bicycle." It is the purpose of this Bicycle Transportation Plan to further these policies and goals by providing an overview of existing bikeways and bicycle support facilities as well as planned improvements.

The City of Mountain View Public Works Department, in concert with the Mountain View Bicycle/Pedestrian Advisory Committee, developed the Mountain View Bicycle Transportation Plan. This plan was also developed to work within the guidelines of applicable local and regional plans as well as with Caltrans Bicycle Transportation Unit guidelines.

Each chapter in the plan describes a different facet of the bikeway network. Chapter 1 gives an overview of the goal of the plan as well as how it conforms to existing policies and development plans. Chapter 2 describes the land use in Mountain View and the existing bikeway network. Chapter 3 describes planned improvements to the bikeway network, including planned projects and projects currently underway. Chapter 4 details bicycle support facilities such as bike parking and locker room facilities. Finally, Chapter 5 describes educational, enforcement and promotional programs in Mountain View.

Together, these elements present a comprehensive overview of the entire bikeway system. This plan will also serve as a guide for the development of the planned improvements described within.

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# CHAPTER 1

#### **Overview**

In 1992, the Mountain View General Plan was adopted by the City Council. This plan contains a bicycle element establishing general goals and policies relating to the development of Mountain View's bikeway network. To address the need for a comprehensive policy document to plan all cycling related projects, the City developed the Mountain View Bicycle Transportation Plan. This plan addresses the current condition of the bikeway system, planned improvements, bicycle parking and support facilities as well as education, promotion and enforcement efforts.

#### Goal of the Bike Plan

Cycling offers residents a number of benefits, including improved health, reduced air pollution and reduced traffic congestion. Although cycling is not without risk, these benefits, combined with Mountain View's generally flat terrain and mild year-round climate, make cycling a truly viable transportation/commute alternative and an enjoyable recreational activity. As a result, the Mountain View Bicycle Transportation Plan was developed with one primary goal in mind:

To provide a safe and efficient bicycle network that improves access, eliminates barriers to bicycle travel, encourages automobile trip reduction and promotes cycling as a recreational activity as well as a transportation/commute alternative.

#### **Conformance with Existing Plans**

Several existing planning documents address topics related to cycling within the City of Mountain View. This plan was developed in conformance with the following:

#### 1992 Mountain View General Plan

The General Plan was adopted by the City Council to provide a long-range planning document for development within the City. In the circulation chapter, it contains policies for creating a bicycle system, providing bicycle parking and allowing bicycles on public transportation. These policies, as well as many of the specific action items in the General Plan, have been implemented or are supported by this plan.

Santa Clara Valley Transportation Authority (VTA) County-wide Bicycle Plan
The VTA County-wide Bike Plan is a 20-year plan to integrate bicycle transportation
into the total transportation system.<sup>1</sup> The VTA designed a regional plan, allowing local
jurisdictions to develop plans accommodating the needs of their communities.
Mountain View's plan has been developed within VTA guidelines.

#### Metropolitan Transportation Commission (MTC) Regional Bicycle Plan

The MTC Bike Plan is also regional in focus and concentrates on broader policies and programs, deferring development of local bike plans to each city and county within the Bay Area.<sup>2</sup> Again, Mountain View's plan has been developed to work in concert with this regional plan.

#### Santa Clara County Trails Master Plan

The objective of the Trails Master Plan is to develop a countywide system of trails designed to connect each city to open space, parks and to one another. This plan identified two trail routes in the City of Mountain View: a portion of the Bay Trail and the Stevens Creek Trail. The Bay Trail and the Stevens Creek Trail have been built in accordance with this plan. When constructed, the final segment of Stevens Creek Trail will also be built according to the Trails Master Plan guidelines.

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<sup>&</sup>lt;sup>1</sup> VTA, Santa Clara Countywide Bicycle Plan

<sup>&</sup>lt;sup>2</sup> MTC, Regional Bicycle Plan

#### Streets and Highways Code Section 891.2

This code establishes criteria for the development of local bicycle plans and is administered by the Caltrans Bicycle Transportation Unit (BTU). The plan was developed to meet all of the code requirements, included in Appendix A.

#### **Community Involvement**

To solicit public input, the plan was developed in concert with the Bicycle/Pedestrian Advisory Committee (B/PAC), a group of five Council-appointed individuals who live or work in Mountain View. The B/PAC reviewed and commented on the plan in between June 2007 and January 2008. The Council Transportation Committee (CTC) reviewed and forwarded the plan to the City Council in March 2008. The City Council formally adopted the plan on May 27, 2007.

Prior to each public meeting, City staff posted notices on the City website, at City facilities and placed ads in local papers. The City's B/PAC also invited local cycling organizations to comment on the plan. Additionally, an electronic copy of the plan has been available on the City's website throughout the update process.

#### Plan Updates

To remain in conformance with local, regional and State guidelines, the Mountain View Bicycle Transportation Plan is updated every three to four years to include the most current information about the bikeway system and proposed improvements. However, more frequent updates may be necessary if regulations change or if directed by the Mountain View City Council.

## CHAPTER 2

#### **Land Use In Mountain View**

The City of Mountain View is located in the northern portion of Santa Clara County in the San Francisco Bay Area. The City is approximately 12 square miles in size with a population of about 72,000.<sup>1</sup> There is a wide diversity of land uses within the City, ranging from large commercial/industrial areas to the north and east and housing of varying densities to the south and west. The Zoning/Land-Use Map, Figure 1, shows these areas.

#### **Existing Bikeway Network**

According to 2000 Census data, approximately 2.9 percent of Mountain View residents commute by bicycle. To accommodate the needs of bicycle commuters and casual bicycle riders, the City of Mountain View has developed over 40 miles of bikeways in the past 25 years at a cost of over \$30 million.

While all non-freeway roads are legally accessible to cyclists, the City established a network of bikeways appropriate for cyclists of varying skill levels. The bikeway network in Mountain View connects neighborhoods with transit, employment centers, shopping areas and public facilities, such as parks and community buildings. There are also connections to the neighboring Cities of Palo Alto, Sunnyvale and Los Altos. Figure 2 shows the existing bikeway system in Mountain View.

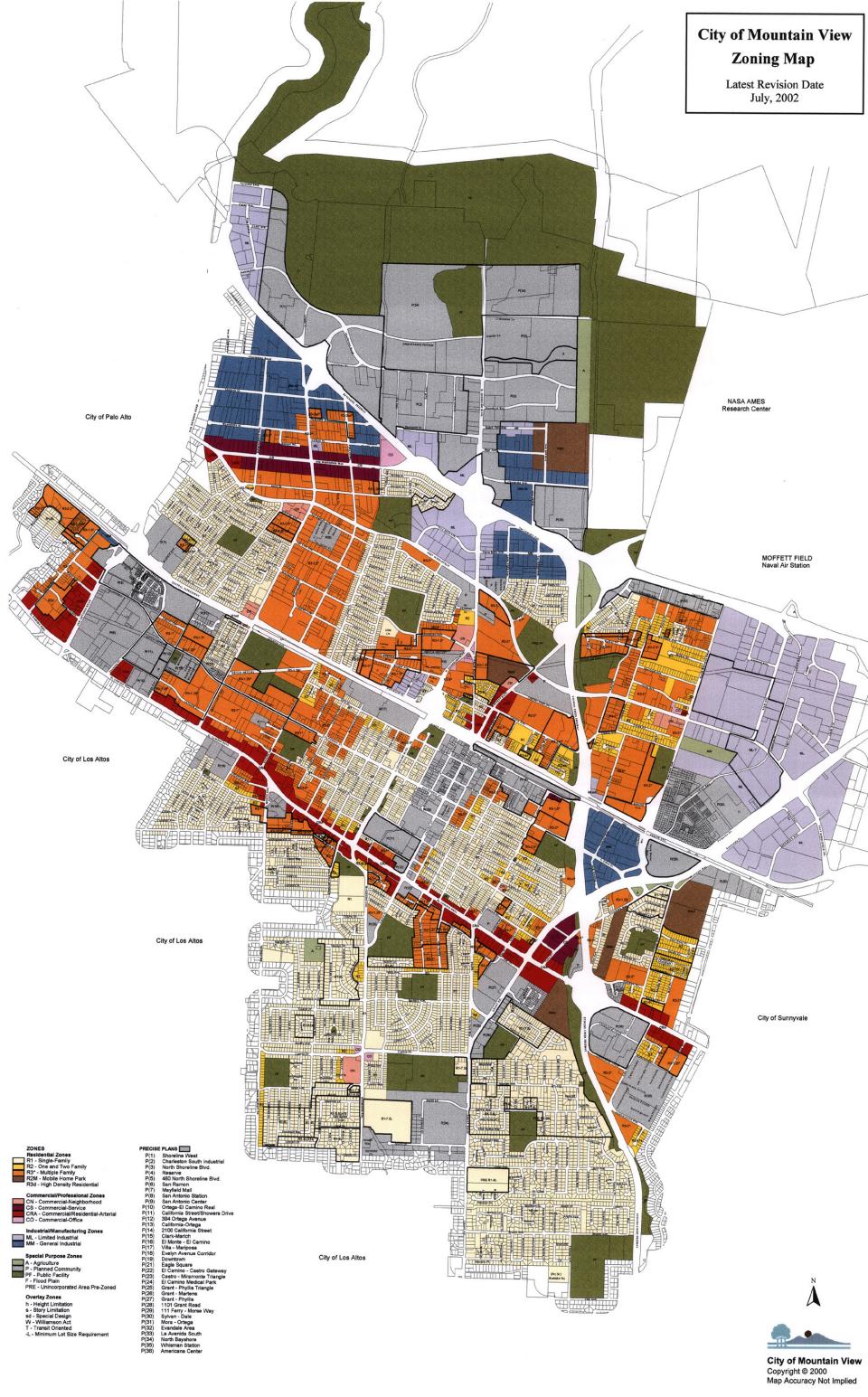
#### **Bikeway Classifications**

There are four bikeway classifications in the City of Mountain View, all meeting the design guidelines of the VTA *Bicycle Technical Guidelines* for on-street bicycle facilities and the Caltrans *Highway Design Manual*, Chapter 1000 for multi-use trails.

<sup>&</sup>lt;sup>1</sup> Projections 2007, Association of Bay Area Governments

## Figure 1: Zoning/Land-Use Map

See Map on Next Page



### Figure 2: Bikeway Map

See Map on Next Page

City of Mountain View **Bikeways** 1 mile MODIFIED RO Louis Rd PHITHEATRE PKWY 101 RD N. ALTO ESTON CHARLESTON RO ANTONIO RO MOFFETT FEDERAL SHORE AIRFIELD (NASA) Z Old Middlef La Avenida \*\*\*\* EL CAMINO anden sol Park MIDDLEFIELD RD San Antonio Station BAYSHORE FWY 101 REAL S REWORTS AVE n Antoni CENTRAL San Antonio Transit Center n VTA LIGHT E MIDDLEFIELD RD EXPW Los Altos Ave 85 Middlefield Station ANTONIO W EVELYN AVE CENTRAL 237 Whisma Station EL CAMINO Evelyn Station Eagle Park EYELYN REAL LOS SAN FOOTHILL Almond Av CALTRAIN = ST WORLD W Edith Ave GREAT AND ENTHINE & Bubb Park AVE DR CUESTA EL CAMINO REAL CUESTA DR 85 8 MIRAMONTE SPRINGER El Camino Hospital & HONTE DO SUNNYVALE 0 2 GRANT FOOTHILL EXPAN ALCOALERA AVE RAMONTE AVE 280 LOS ALTOS HILLS LOS ALTOS G Designated Bike Lane Path Entry Streets which tend to have low to moderate traffic volumes, some vehicle on street parkin and varying bike riding areas. VTA Station Streets which tend to have high traffic volumes, with high vehicl speeds, narrow bile riding area and a high number of turning vehicles across bicyclist's path. Public Sch Proposed Bike Path © 2007 Map by Eureka Cartography, Berkeley, CA

#### Class I: Bike Path

Bike paths provide a completely separate right of way for the exclusive use of bicycles and pedestrians with minimal roadway crossings. They are an important component of Mountain View's bicycle network as they provide a safe environment for younger or less experienced cyclists who do not want to ride alongside traffic or do not want to travel at a fast pace. However, more experienced riders may find high-speed travel difficult due to the volume of casual users.

Existing Class I bike paths in Mountain View include the Stevens Creek Trail, Hetch-Hetchy Trail, Permanente Creek Trail and a portion of the Bay Trail through Shoreline Regional Park. These paths may be identified on the bikeways map.

Figure 3: Class I Bike Path – Stevens Creek Trail





#### Class II: Bike Lane

Bike lanes provide a striped lane for one-way bike travel on a street or highway and are designed for the exclusive use of cyclists with certain exceptions. For instance, right-turning vehicles must merge into the lane before turning, and pedestrians can use the bike lane when there is no adjacent sidewalk. Bike lanes in Mountain View meet the VTA's *Bicycle Technical Guidelines*, which follows all applicable local, State and Federal requirements. The bikeway map identifies these lanes.



Figure 4: Class II Bike Lane on Dana Street

#### Class IIIa: Bicycle Route

The bicycle route may be identified on a local residential or collector street when the travel lane is wide enough and the traffic volume is low enough to allow both cyclists and motor vehicles. Although some wide streets with high volumes of traffic could be designated as bike routes, official bike routes in Mountain View are on low-volume streets. Again, these bike routes are identified on the bikeway map.

Figure 5: Class III Bike Route on Calderon Avenue



#### Class IIIb: Bicycle Boulevard

A bicycle boulevard is a modified bicycle route providing a more convenient and efficient through route for cyclists of all skill levels than a typical bike route. A bike boulevard includes signage, pavement markings and, in some cases, traffic calming. Since adoption of the plan in 2003, Mountain View has implemented a demonstration bicycle boulevard in the northern area of the City, shown in Figure 6. If successful, additional bicycle boulevards may be implemented in the future. Proposed bicycle boulevard routes are contained in Chapter 3.



Figure 6: Bike Boulevard on Stierlin Road

#### Multi-Modal Access

The bikeway network connects to the extensive regional public transportation system, including Santa Clara Valley Transportation Authority (VTA) bus, light rail and Caltrain commuter rail stops. The bikeway network also connects to the Downtown Transit Center, a multi-modal transit hub providing shuttle bus, VTA bus, light rail and Caltrain commuter rail services. This and other larger transit stops are indicated on the bikeway map.

All light rail cars and buses serving Mountain View are equipped with bike racks and Caltrain commuter rail dedicates at least one-half of one car per train for cyclists and their bikes. Cyclists using the public transit system can access amenities within Mountain View, surrounding cities, airports and intercity Amtrak rail stations.

Figure 7: Downtown Mountain View Transit Center



#### Traffic Signals

Many City owned traffic signals on collector and arterial streets are equipped to detect bicycles. Loop detectors signal the traffic signal controller when vehicles are present. At intersections with bike lanes, a separate loop detector is placed in the bike lane. In this case, signal timing has been adjusted to allow additional time for cyclists to cross the intersection. At intersections without bike lanes, detectors are often marked with a bicycle symbol to show where to place bicycles to trigger the signal. Pavement markings are located in the far right travel lane and left turn lanes. Signal timing at these intersections has been adjusted as detectors cannot distinguish between motor vehicles and bicycles.

Loop detectors and pavement markings are installed according to Caltrans standards. Figure 8 shows a photo of its placement on a City street. Signal timing policies follow accepted traffic engineering standards developed by the Institute for Transportation Engineers (ITE).



Figure 8: Bicycle Loop Detector Pavement Marking

#### **State and County Bicycle Facilities**

There are two major roadways, operated by other agencies, which traverse the City and allow bicycles: Central Expressway, operated by Santa Clara County, and El Camino Real, operated by Caltrans. On Central Expressway, cyclists must ride as close to the right-hand edge of the roadway as practicable, while on El Camino Real, Caltrans encourages cyclists to ride in the right hand vehicle lane. Neither roadway has dedicated bike lanes.